

An Annotated List of the Siphonaptera of Connecticut

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Abstract: In previous papers, eleven species of fleas have been reported from Connecticut. The present list, consisting largely of specimens collected by the senior author in Windham and Tolland counties, adds eleven species to those previously recorded from the state. The additional species include: *Atyphloceras bishopi* Jordan, *Catallagia borealis* Ewing, *Tamiophila grandis* (Rothschild), *Nearctopsylla genalis genalis* (Baker), *Stenoponia americana* (Baker), *Rhadinopsylla orama* Smit, *Megabothris asio asio* (Baker), *Orchopeas leucopus* (Baker), *Peromyscopsylla hamifer hamifer* (Rothschild), *Peromyscopsylla hesperomys hesperomys* (Baker), and *Peromyscopsylla scotti* I. Fox. A hypothetical list of twenty species is appended.

Although publications have appeared listing the fleas of several neighboring states (e.g., Geary, 1959; Mathewson and Hyland, 1964; Osgood, 1964), no separate list of Connecticut fleas has been published, and records of fleas are few. Fox (1940) gave records of only seven species from the state. Fuller (1943) added two more, and Main (1970) brought the list to eleven. Since the New York list is nearly fifty species, the Vermont list thirty-three, and the Rhode Island list eighteen, it is evident that these lists are very incomplete.

During 1963 to 1966 the senior author collected 803 fleas from mammals in Tolland and Windham counties. These specimens were prepared and identified by the junior author. The junior author was privileged also to examine specimens in the collection of the Archbold Biological Station, Lake Placid, Florida, which had been collected in Connecticut by Dr. John Mackiewicz. We are grateful to Dr. James N. Layne for the opportunity to include these specimens in the present list.

The collections here reviewed include eleven species previously unrecorded from Connecticut, thus doubling the number of flea species known from the state. We include also a hypothetical list, including twenty additional species which have been taken in states bordering Connecticut from hosts which occur within the state. The total expected state list thus approximates forty species.

Nomenclature of the Siphonaptera follows Hopkins and Rothschild (1953 et seq.). Mammalian nomenclature follows Hall and Kelson (1959).

FAMILY PULICIDAE

Cediopsylla simplex (Baker)

Counties: Litchfield, Middlesex (Main); Oxford (Mackiewicz); Windham

Hosts: *Sylvilagus floridanus*;* occurs also on *S. transitionalis** and *Lepus americanus** and occasionally on their predators and ecological associates

Ctenocephalides canis (Curtis)

Counties: Hartford (Main)

Hosts: *Canis familiaris*;* also occurs on wild foxes

Ctenocephalides felis felis (Bouche)

Counties: Fairfield, Hartford, New Haven, Tolland, Windham (Main)

Hosts: *Canis familiaris*;* *Felis domestica*;* also occurs on wild predators and will bite man freely.

FAMILY HYSTRICHOPSYLLIDAE

Atyphloceras bishopi Jordan

Counties: Tolland, Windham

Hosts: *Microtus pennsylvanicus*;* *Clethrionomys gapperi*; *Synaptomys cooperi*; *Blarina brevicauda*

Catallagia borealis Ewing

County: Windham

Hosts: *Clethrionomys gapperi*;* *Synaptomys cooperi*

Tamioiphila grandis (Rothschild)

County: Windham

Host: *Mustela* sp. This is a parasite of the chipmunk, *Tamias striatus*, of which the weasel is a predator.

Epitedia wenmanni wenmanni (Rothschild)*Epitedia wenmanni testor* (Rothschild)

Southern New England is within the area of intergradation between these two forms. Our collection includes both subspecies, and three males show intergradation.

Rhadinopsylla orama Smit

Specimens of this species are very rare in collections. It is usually taken from microtines, especially *Microtus pennsylvanicus* and *M. pinetorum*. A single female was collected by John Mackiewicz at Waterbury, June 9, 1952.

County: New Haven

Host: *Microtus pinetorum*

Ctenophthalmus pseudagyrtis pseudagyrtis Baker

Counties: Hartford, New Haven (Main), Tolland, Windham

Hosts: *Blarina brevicauda*, *Sorex cinereus*, *Sorex fumeus*, *Scalopus aquaticus*, *Peromyscus leucopus*, *Clethrionomys gapperi*, *Microtus pennsylvanicus*, *Microtus pinetorum*, *Napeozapus insignis*

Doratopsylla blarinae C. Fox

Counties: Hartford, Windham (Main), Tolland

Hosts: *Blarina brevicauda*,* *Peromyscus leucopus*, *Microtus pinetorum*

Nearctopsylla genalis genalis (Baker)

County: Tolland

Hosts: *Condylura cristata*, *Blarina brevicauda*

Stenoponia americana (Baker)

Counties: New Haven, Tolland

* True hosts, where known with some assurance, are marked with an asterisk.

Hosts: *Blarina brevicauda*, *Peromyscus leucopus*, *Microtus pennsylvanicus*, *Clethrionomys gapperi*

FAMILY CERATOPHYLLIDAE

Ceratophyllus gallinae (Schrank)

Counties: Fairfield, Hartford, New Haven, Windham (Main)

Hosts: A variety of birds, including domestic chickens

Ceratophyllus idius Jordan and Rothschild

County: Windham (Main)

Host: *Iridoprocne bicolor**

Megabothris asio asio (Baker)

Counties: Tolland, Windham

Hosts: *Microtus pennsylvanicus**, *Microtus pinetorum*, *Clethrionomys gapperi*, *Mustela frenata*, *Condylura cristata*

Orchopeas howardii howardii (Baker)

Counties: New Haven (Main), Tolland, Windham

Hosts: *Sciurus carolinensis**, *Glaucomys volans*, *Clethrionomys gapperi*

Orchopeas leucopus (Baker)

Counties: Tolland, Windham

Hosts: *Peromyscus leucopus**, *Clethrionomys gapperi*

Oropsylla arctomys arctomys (Baker)

Counties: Fairfield, Litchfield, Middlesex, New London, Tolland

Hosts: *Marmota monax**, *Urocyon cinereoargenteus*

FAMILY LEPTOPSYLLIDAE

Peromyscopsylla hamifer hamifer (Rothschild)

County: Tolland

Hosts: *Microtus pennsylvanicus*, *Condylura cristata*

Peromyscopsylla hesperomys hesperomys (Baker)

Counties: Tolland, Windham

Hosts: *Peromyscus leucopus**, *Clethrionomys gapperi*

Peromyscopsylla scotti I. Fox

County: Tolland

Host: *Peromyscus leucopus**

FAMILY ISCHNOPSYLLIDAE

Myodopsylla insignis (Rothschild)

Counties: Hartford, Litchfield, New Haven

Host: *Myotis* sp.*

HYPOTHETICAL LIST

The following species have been taken in adjacent states, from hosts known to occur in Connecticut.

FAMILY PULICIDAE

Pulex irritans (Linnaeus)—on humans and mammals associated with houses

Xenopsylla cheopis (Rothschild)—on rats, *Rattus* spp.

FAMILY VERMIPSYLLIDAE

Chaetopsylla lotoris (Stewart)—on carnivores

FAMILY HYSTRICHOPSYLLIDAE

Conorhinopsylla stanfordi Stewart—on *Glaucomys* spp.

Hystrichopsylla tahavuaana Jordan—on moles and shrews

Epitedia faceta (Rothschild)—on *Glaucomys* spp.

Corrodopsylla hamiltoni (Traub)—on *Cryptotis parva*

Corrodopsylla curvata curvata (Rothschild)—on *Sorex* spp.

FAMILY CERATOPHYLLIDAE

Ceratophyllus celsus celsus Jordan—in swallow nests

Ceratophyllus diffinis Jordan—in nests of ground-nesting or low-nesting birds

Ceratophyllus riparius riparius Jordan and Rothschild—in nests of *Riparia riparia*.

Megabothris acerbus (Jordan)—on *Tamias striatus*

Megabothris quirini (Rothschild)—on *Clethrionomys gapperi*

Monopsyllus vison vison (Baker)—on *Tamiasciurus hudsonicus*

Nosopsyllus fasciatus (Bosc)—on *Rattus norvegicus*

Opisodasys pseudarctomys (Baker)—on *Glaucomys* spp.

FAMILY LEPTOPSYLLIDAE

Leptopsylla segnis (Schonherr)—on *Mus musculus*

Odontopsyllus multispinosus (Baker)—on *Sylvilagus* spp. and *Lepus* spp.

Peromyscopsylla catatina (Jordan)—on *Clethrionomys gapperi*

FAMILY ISCHNOPSYLLIDAE

Nycteridopsylla chapini Jordan—on *Eptesicus fuscus*

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